

Atty Dkt. No.: 10990641-1  
USSN: 09/359,527

### **REMARKS**

In view of the following remarks, the Examiner is requested to allow Claims 2-5, 8-14, 17, 49-52, and 55-57, the only claims under examination in this application.

#### ***Claim Rejections - 35 U.S.C. § 103***

Claims 2-5, 8-14, 17, 49-52, and 55-57 were again rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Baldeschwieler et al. (US Patent No. 6,015,880) in view of Weber et al. (US Patent No. 4,328,504). This rejection is respectfully traversed.

The Applicants reiterate their argument advanced in their October 5, 2005 Amendment and Response that Weber et al. is non-analogous art to the claimed invention of the present application and therefore not properly combinable with Baldeschwieler to reject the claims of the present application. In addition, the Applicants reiterate that they discovered the source of a problem that was not appreciated in the art and solved that problem, which is sufficient to overcome the Examiner's assertion of obviousness. The Examiner has responded only to the first of these arguments, and not to the second.

In the Office Action, the Examiner asserted that the ink jet art of Weber et al. is analogous to the art of Baldeschwieler et al. because Baldeschwieler et al. uses an ink jet device in Example 1. The fact remains that Baldeschwieler et al. does not use printing ink whereas Weber et al. does, and that Baldeschwieler et al. is not printing onto paper whereas Weber et al. is. One would not expect the problems faced by Weber et al. to be reasonably pertinent either to those faced by Baldeschwieler et al. or to those faced by the Applicants. The Examiner asserted only that both Baldeschwieler et al. and Weber et al. employ ink jet devices, which allegedly makes the documents analogous.

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The Applicants submit that the Examiner's assertion that Baldeschwieler et al. and Weber et al. are analogous is inconsistent with the criteria for analogous art set forth in MPEP § 2141.01(a), namely:

'In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.' *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992). See also *In re Deminski*, 796 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986); *In re Clay*, 966 F.2d 656, 659, 23 USPQ2d 1058, 1060-61 (Fed. Cir. 1992) ('A reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.'). *Wang Laboratories Inc. v. Toshiba Corp.*, 993 F.2d 858, 26 USPQ2d 1767 (Fed. Cir. 1993); and *State Contracting & Eng'g Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1069, 68 USPQ2d 1481, 1490 (Fed. Cir. 2003) (where the general scope of a reference is outside the pertinent field of endeavor, the reference may be considered analogous art if subject matter disclosed therein is relevant to the particular problem with which the inventor is involved).

Conventional ink jet printing of printing ink onto paper would not logically commend itself to an inventor in the biopolymer array art in considering problems with making arrays via deposition of biopolymers, nor would the particular problems with conventional ink printing onto paper be reasonably pertinent to making biopolymer arrays. As such, Weber is not properly combinable with Baldeschwieler.

Moreover, the Examiner has not addressed the fact that the Applicants were the first to recognize a specific problem in the fabrication of biopolymer arrays.

Specifically, the present invention is directed to the problem in which positive features during an array assay nonetheless give rise to a weak signal that may be difficult to distinguish from background, particularly at the feature border. This problem can become exaggerated when the array pattern of a given array is different from the target array pattern according to which the array was fabricated due to errors arising during the manufacture process.

As such, it is desirable during the manufacture of an array to ensure that any discrepancy between an actual array pattern and the target array pattern according to

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which it was fabricated be kept at a minimum. Such is desirable so that, during use, one can know precisely where features of the array are located.

These problems were not appreciated by Baldeschwieler and were first identified and then solved by the Applicants in the present application.

There is a body of decisional law holding that this is basis for unobviousness. "[Where] there is no evidence of record that a person of ordinary skill in the art at the time of [an applicant's] invention would have expected [a problem] ... to exist at all, it is not proper to conclude that [an invention] ... which solves this problem ... would have been obvious to that hypothetical person of ordinary skill in the art." *In re Peehs*, 612 F.2d 1287, 1290, 204 USPQ 835 (CCPA 1980) (citing *In re Nomiya*, 509 F.2d 566, 572, 184 USPQ 607, 612-13 (CCPA 1975))(emphasis added). The Examiner has not established that the problem in the biopolymer array art that was recognized and solved by the Applicants was known or expected *in the biopolymer array art*.

The Applicants also reiterate that without an appreciation of the problem solved by the present invention, there would have been no motivation to combine the teachings of Baldeschwieler et al. and Weber et al. to arrive at the claimed invention because there would have been no motivation to look to non-analogous art to solve an unrecognized problem in the biopolymer array art. Without knowledge of the problem, there would have been no need to combine the documents, the expense of making the combination would be high, and there would have been no expected benefit to making the combination.

Furthermore, one would not be motivated to go the extra step of correcting for errors so as to reduce discrepancies between the actual and target array pattern, because one would not appreciate that such discrepancies would occur or further that such discrepancies, if present, would have any effect on the usability of the array. In fact, one of skill in the art would not have been motivated to modify Baldeschwieler because any such modification would have added to the expense of the process without any benefit.

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As such, Claims 2-5, 8-14, 17, 49-52, and 55-57 are not obvious under 35 U.S.C. § 103(a) over Baldeschwieler et al. (US Patent No. 6,015,880) in view of Weber et al. (US Patent No. 4,328,504). Withdrawal of this rejection is therefore respectfully requested.

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**CONCLUSION**

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone Bret Field at (650) 833-7770.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-1078, order number 10990641-1.

Respectfully submitted,

Date: March 3, 2006

By: 

Richard A. Schwartz  
Registration No. 48,105

Date: March 3, 2006

By: 

Bret E. Field  
Registration No. 37,620

AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, CO 80537-0599

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